

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

FOR ASSET ALLOCATION STRATEGY

August 11, 2006 September 11, 2006

This Policy is effective immediately upon adoption and supersedes all previous asset allocation strategy policies.

I. PURPOSE

This document sets forth the investment policy, guidelines, and procedures ("the Policy") for determining the strategic management of the California Public Employees' Retirement System's ("the System") assets through their allocation, known as the Asset Allocation Strategy ("the Program"). The Policy allows for sufficient flexibility to capture investment opportunities as they may occur, yet provides reasonable parameters to ensure prudence and care while managing the Program. The System recognizes that asset allocation decisions generally account for about 90% of the investment return for a large pool of assets.

II. STRATEGIC OBJECTIVE

The Program shall be managed to accomplish the following:

- A. Assure the availability of sufficient assets to pay benefits;
- B. Minimize and stabilize employer and employee contributions;
- C. Achieve the highest rate of total return possible within prudent levels of risk and liquidity; and
- D. Maintain sufficient diversification to avoid large losses and preserve capital.

III. RESPONSIBILITIES AND DELEGATIONS

- A. The **System's Investment Committee** ("the Investment Committee") approves and amends the Policy. The Committee delegated the responsibility for administering the Policy to the System's Investment Staff.

- B. The **System's Investment Staff** ("the Staff") shall conduct analyses and the annual reviews of the Program and present their findings to the Investment Committee. The Staff shall also implement, monitor adherence to and report monthly to the Investment Committee regarding the Program.
- C. The **General Pension Consultant** and other consultants deemed appropriate shall assist in the development of the financial study and monitoring the Program. The General Pension Consultant shall review the Program and present its findings to the Investment Committee annually.

IV. BENCHMARK

The Program, at a minimum, shall generate a long-term total return that meets or exceeds the actuarial interest rate assumption.

V. GENERAL

- A. The Program shall be determined solely in the interests of the System's beneficiaries. The Program shall ensure that funds are managed with care, skill, prudence, and diligence.
- B. The Program shall reflect analyses that consider the current and expected financial condition of the System. Analyses shall also encompass the expected long-term capital markets outlook, the expectations of inflation, the System's liabilities, the integration of assets and liabilities, and the System's overall risk tolerance.
 - 1. Analyses shall consider and include various suitable asset classes and their correlations in accordance with Section V of this Policy.
 - 2. Analyses shall consider relevant and timely [decision factors](#). The System is recognized as a growing and dynamic entity. Therefore, the factors ultimately driving the selection of an asset allocation strategy and their relative importance will change over time. These decision factors shall be reviewed as part of the preparation for the Asset/Liability Management Workshop, as specified in Section V.C. Decision factors may include, but are not limited to, the following:
 - a. Improve funding;

- b. Avoid deterioration in funding;
- c. Seek low cost;
- d. Avoid cost catastrophe.

Analyses of alternative allocation strategies shall measure the potential impact of expected risk and return, diversification, projected liabilities, [funded ratio](#), and [contribution rates](#) and variability.

- 3. The Investment Committee shall approve strategic asset allocation targets and ranges expressed as a percent of the total assets. The Investment Committee shall set ranges, thereby avoiding excessive transaction costs caused by too frequent re-balancing. Nevertheless, ranges shall be sufficiently narrow to maintain the basic risk/return relationship established by the allocation targets.

Within range tactical changes shall be made to reflect current economic conditions and asset class return assumptions. These changes may be effected by the movement of capital between asset categories or by hedging with derivatives. Any such hedging activity will be carried out under the provisions of the Derivatives – Investment Office Policy document and section VIII, Derivatives and Leverage Policy of this document.

- C. A comprehensive Asset Allocation analysis shall be completed every three years, unless a significant structural change occurs in liabilities or investment assets as determined by the Investment Committee, Investment Staff, or Actuarial Staff. Additionally, the Program shall be reviewed at least annually to ensure that it achieves expected financial goals it was designed to accomplish and that all assumptions used in establishing the Program are reasonable.
- D. In the event that economic circumstances warrant an increase or decrease to a specific asset class, staff has the flexibility to recommend a change to the strategic targets. This flexibility allows staff to add further value to the Fund when it is clear a specific asset class is expected to significantly out perform or under perform other CalPERS' asset classes on a risk-adjusted basis. Staff shall bring any recommendation to the Investment Committee as part of its

annual Investment Plan. Any recommended change to a target would not exceed 2%. A target for cash is exempt from consideration.

VI. ASSET CLASSES

Asset classes that are candidates for inclusion shall be reviewed in conjunction with the Program. Financial and real asset types shall be considered as viable asset classes if they have a risk, return, and correlation profile sufficiently different from other considered asset classes, and if their inclusion or exclusion affects the risk and return expectations of the System's total return.

- A. Criteria for an asset class shall include, but are not limited to, the following:
 - 1. Sufficient size, liquidity, and cost efficiency to permit the System to invest meaningful amounts in that asset class, and to have an impact on total return.
 - 2. Availability of sufficient internal or external investment and technical expertise to ensure prudent implementation of an investment in that asset class.
 - 3. Presence of diversification, return enhancement, liquidity provision, or some other readily identifiable attribute sufficiently different from other asset classes and which enhances the System's ability to achieve the strategic objectives outlined in Section II.
 - 4. Acceptance by other large pension plan sponsors as a viable and meaningful asset class, or in the absence of such acceptance, an academic basis or foundation for its inclusion.
 - 5. Availability of sufficient data, history, or expertise to assess the viability or benefit of the asset class to the System, by means of a measurable investment outcome. Furthermore, the asset class must have a basis for developing expected investment returns, risks, and correlations for the purposes of the financial study.
- B. An asset class may be approved for investment provided it meets the above-mentioned criteria. The Investment Committee has had the opportunity for sufficient education through System-sponsored

workshops or other sources or both to enable it to fulfill its fiduciary responsibility in making such an approval.

- C. Once the System approves an asset class for investment, as part of the Program, the investment may only be made in accordance with a policy reviewed and approved by the Investment Committee for that asset class. Such a policy shall specify the method and parameters for implementation and provide for the on going monitoring of that asset class.

VII. IMPLEMENTATION, MONITORING, AND REPORTING

- A. Implementation of the Program shall take place only after Investment Committee adoption of a transition plan. The plan shall recognize the unique characteristics of the asset classes affected by the transition, the associated costs, the System's policies for each asset class, the System's asset size, and the appropriate time horizon.
- B. Adherence to the Asset Allocation target allocations shall be monitored and reported to the Investment Committee as part of the Monthly Chief Investment Officer Report. This report shall display the actual asset allocation on a market value basis versus the target allocation and the permissible range for each broad asset class. The report shall also display the investment performance results of each asset class versus both the appropriate benchmark returns as specified in the asset class Policy and the expected long-term return.
- C. The Asset Allocation shall be considered out of compliance when exposure to each broad asset class is above or below its range. To re-establish compliance, the Chief Investment Officer shall develop a plan for Investment Committee consideration for re-balancing the allocations to target, recognizing that the System is a long-term investor and that cost minimization shall be a key consideration. The plan shall reflect the unique characteristics of each asset class, its liquidity, and any other relevant considerations to ensure prudence and care.
- D. If market conditions or other relevant and important considerations make rebalancing to target problematic, the Chief Investment Officer may seek an exception to Section. VII.C. of this Policy from the Investment Committee.

VIII. DERIVATIVES AND LEVERAGE

A. Strategies

The System may use financial futures, forward contracts, swaps and options in the Fund for the following purposes:

1. Implement tactical adjustment, within approved ranges, of the asset allocation by executing hedge transactions.
2. Minimize the investment impact of average cash balances held in cash equivalents accounts by overlaying the appropriate asset class derivatives.

B. Justification

Justification for the above mentioned strategies includes the following:

1. Enhance the System's total return;
2. Reduce the risk assumed in the Fund; and
3. Minimize the execution cost of tactical asset allocation adjustments.

C. Risks

Derivatives used in executing this Policy carry with them a variety of risks. The description of these risks and the manner by which these risks are controlled are:

1. Pricing risk is defined as the risk that the fair value of an asset can not be established. Derivatives traded under this policy shall avoid this risk by either being listed on a public securities exchange or by being based on a published, recognized financial market measure;
2. Liquidity risk refers to the inability of closing out a position at a price approximating fair value. In general, a positive cash flow status within the Plan minimizes liquidity risk. Derivatives used in this Policy shall have a finite time horizon to their expiration and final settlement. Any instruments utilized for a position with greater than 6 months until expiration shall be constrained to

issues currently trading on a public securities exchange or shall contain a "break" clause as part of the contract language; and

3. Legal risk is the inability of enforcing the provisions of a contract. Listed derivatives used in executing this Policy shall be limited to issues traded and settled via recognized public exchanges and clearing entities. For over the counter issues, only counter parties where CalPERS has an executed International Swaps and Derivatives Association (ISDA) agreement shall be eligible.

D. Monitoring

The applicable Investment Office functional area shall provide periodic updates regarding the status of any asset allocation hedges. These updates are to be provided to the Chief Investment Officer, Senior Investment Officer (SIO) and any other portfolio management staff involved with such activity. The Board shall be provided with quarterly updates. Updates shall include the notional value of any positions, any trading activity since the previous update, the most recent asset class allocation analysis and the current gain or loss on the position.

E. Leverage

Derivative trades to effect asset allocation adjustments shall be designed to avoid creating leverage or investment exposure in excess of the total assets of the plan. The use of derivatives over average cash balances in accordance with Section VIII, Subsection A. 2 may cause modest leverage of the particular cash equivalents account, which shall be acceptable for operational efficiency and cost management and is consistent with Section V., Subsection E of the Statement of Investment Policy for Derivatives - Investment Office. This modest leverage shall be regularly monitored, at least monthly, to ensure that leverage in excess of total plan assets does not occur. As a guideline, any amount of temporary leverage should not exceed \$500 million.

F. Exposure Limit

Derivative exposure used to adjust the Plan's asset allocation is limited to amounts that maintain the various asset classes within their approved ranges. Should subsequent changes in market values cause any asset class exposure to fall outside the approved ranges, it

shall be immediately brought to the attention of the CIO and applicable SIO to determine appropriate action.

G. Counterparties

Exchange traded derivative transactions will be executed using CalPERS' normal brokerage entities. Over the counter (OTC) derivative transactions shall only be executed with counterparties where CalPERS has an executed ISDA agreement.

H. Prohibited Uses

This Policy authorizes only activity expressly designed to adjust the asset allocation. It does not authorize any other derivative trading purpose nor does it alter derivatives activity authorization given under other approved Policy documents.

VIII. GLOSSARY OF TERMS

Definitions for key terms used in this policy are located in the Miscellaneous Glossary of Terms which is included in the System's Master Glossary of Terms.

Approved by the Policy Subcommittee:	August 12, 1998
Adopted by the Investment Committee:	August 14, 1998
Revised by the Policy Subcommittee:	December 13, 2002
Adopted by the Investment Committee:	February 18, 2003
Revised by the Policy Subcommittee:	December 10, 2004
Adopted by the Investment Committee:	February 14, 2005
Revised by the Policy Subcommittee:	June 10, 2005
Adopted by the Investment Committee:	August 15, 2005
Revised by the Policy Subcommittee:	August 11, 2006
<u>Adopted by the Investment Committee:</u>	<u>September 11, 2006</u>

Asset Class Glossary: Miscellaneous
Policy: Asset Allocation Strategy
~~August 11, 2006~~ September 11, 2006

Contribution Rate

The ratio of employer contributions divided by payroll.

Decision Factors

A measure or characteristic used for relating strategic goals to a specific asset allocation decision.

Funded Ratio

The ratio of market value to assets divided by liabilities.